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**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

GB/T 25196-2018

Replacing GB/T 25196.1-2010

Cranes -- Monitoring for crane design working period

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Foreword

This standard was drafted in accordance with the rules given in GB/T 1.1-2009.

This standard replaces GB/T 25196.1-2010 "Crane Status Monitoring Part 1. General", and GB/T 25196.1-2010

In comparison, the main technical changes are as follows.

- Modified standard name (see cover);
- Revised the scope of the content (see Chapter 1, Chapter 1 of the.2010 edition);
- Modified terms and definitions (see Chapter 3, Chapter 3 of the.2010 edition);
- Increased crane work records, design work cycle assessment (see Chapters 4 and 5);
- Revised the content of the special assessment (see Chapter 6, Chapters 4, 6, 7, and 9 of.2010);
- Increased the content of crane overhaul (see Chapter 7);
- Increased DWP calculations for cranes and hoisting mechanisms (see Appendix A, Appendix B);
- Removed the contents of the evaluation criteria for the series of lifting hoists in the original standard (see Appendix A of the.2010 edition).

This standard uses the translation method equivalent to ISO 12482.2014 "Monitoring of crane design work cycle".

The documents of our country that have a consistent correspondence with the international documents referenced in this standard are as follows.

- GB/T 6974.1-2008 Crane terminology Part 1. General terms (ISO 4306-1.2007, IDT)
- GB/T 20863.1-2007 Classification of cranes and cranes - Part 1. General (ISO 4301-1. 1986, IDT)
- GB/T 23724.1-2016 Crane inspection Part 1. General (ISO 9927-1.2013, IDT)

For ease of use, the following editorial changes have been made to this standard.

---Remove references in the original text of the international standard.

AS2550-1..2011Cranes, hoistsandwinches-Safeuse-

Part 1. Generalrequirements) and Assessmentofexistingsteelstructures.recommendations

Forestimationofremainingfatiguelife-backgrounddocumentsinsupporttotheimplemen-

Ttation,harmonizationandfurtherdevelopmentoftheEurocodes,jointreport,EUR23252

EN,.2008.

This standard was proposed by the China Machinery Industry Federation.

This standard is under the jurisdiction of the National Crane Machinery Standardization Technical Committee (SAC/TC227).

This standard is drafted by. Weihua Group Co., Ltd., Beijing Crane Transportation Machinery Design and Research Institute Co., Ltd.

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1 Scope

This standard specifies the method for monitoring the actual working conditions of the crane during long-term use, and specifies and grading (related design standards).

See ISO 4301-1) for the initial design work tasks to be compared. The closer to the design life limit, the possibility of danger

The greater the sex. The crane usage monitoring method specified in this standard is used to predict whether the crane is close to the design life limit and pay attention to the crane off

Special inspection of the key parts.

This standard is mainly used to adjust or change the inspection requirements specified in ISO 9927-1.

This standard applies to cranes with a permanent construction throughout their life.

This standard does not apply to mobile and tower cranes, except for permanently installed tower cranes.

Note. The methods specified in this standard are used by standards or procedures in addition to ISO 4301-1, which can be classified.

2 Normative references

The following documents are indispensable for the application of this document. For dated references, only the dated version applies to this article.

Pieces. For undated references, the latest edition (including all amendments) applies to this document.

ISO 4301-1 Classification of cranes and cranes - Part 1. General
(Cranes and lifting appliances - Classification - Part 1. General)

ISO 4306-1 Crane Terminology Part 1. Generic Terminology (Cranes - Vocabulary - Part 1. General)

ISO 9927-1 Crane inspection Part 1. General (Cranes - Inspections - Part 1. General)

3 Terms and definitions

The following terms and definitions defined by ISO 4301-1 and ISO 4306-1 apply to this document.

3.1

Design work task design duty

The capacity of the crane or hoisting mechanism determined by the initial design grading throughout the effective working time.

3.2

Design life design life

Estimated allowable work based on initial design requirements of the crane and considering the number of working cycles and the expected load spectrum of the expected operating conditions

cycle.

3.3

Design work cycle design working period; DWP

The running time of the design task is reached under the specified actual work tasks.

3.4

Special assessment special assessment; SA

A comprehensive inspection of the crane or hoisting mechanism when the actual work of

the crane or hoisting mechanism is close to the design task

And assessment.

3.5

Overhaul generaloverhaul;GO

In order to extend the safe life of the crane, all modifications and maintenance activities are carried out according to the special assessment (SA).

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